

AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph beginning at page 1, line 35 to page 2, line 5 to delete the extra parentheses as follows:

The inventors have surprisingly found that the human protein *Deleted in Malignant Brain Tumors 1* (DMBT1, the full-length protein thereof is shown in SEQ ID NO:1)[()] is a dual-specific PRR for non-self (bacterial cell wall components, gp120 of HIV, damage-, inflammation-, and cancer-causing sulfated carbohydrates) and self structures (DNA, phospholipids, cell surface and extracellular matrix carbohydrates), which interacts with accessible sulfate and/or phosphate groups, which are present on numerous compounds, compositions and organisms.

Please amend the paragraph beginning at page 2, line 23 to page 3, line 5 as follows:

The inventors have now found that pattern recognition of DMBT1 is mediated via an 11 amino acid motif that binds sulfate and phosphate groups. In addition, germline deletions in humans quantitatively impair its scavenging activity, as exemplified for Streptococci, Salmonella, Helicobacter pylori. It is proposed by the present invention that pattern recognition provides a common mechanistic basis for DMBT1's putative broad functional spectrum, which includes tumor suppression, epithelial differentiation, tissue protection and regeneration, pathogen-defense, and gallstone formation. By acting as dual-specific PRR, DMBT1 may exert a general insulator function against a broad range of pathogens, which predicts a contribution of DMBT1 germline deletions to human susceptibility to infection, inflammation, and cancer. Furthermore, the inventors found that a ~~by~~ 40% decreased in level of DMBT1 in male mice correlates with an increased susceptibility and with a deficient protection against dextran sulfate sodium (DSS)-induced tissue damage and inflammation in the colon. Human DMBT1 directly interacts with DSS and carrageenan, the latter being used as stabilizer in human food and suspected to cause inflammation and colorectal cancer. The interaction with DSS and carrageenan is mediated via the DMBT1 binding site for bacterial and viral pathogens described supra. The efficacy of the

medicament provided by the present invention is mediated by the interaction of DMBT1 with an accessible sulphate or phosphate group displayed or exposed by the disease-causing agent.

Please amend the paragraphs beginning at page 8, line 7 of the Specification and ending at page 8, line 23 as follows:

Preferably, the microorganism is a bacterium or a virus, the bacteria including the genera

~~Streptococcus, Staphylococcus, Escherichia, Helicobacter, Salmonella~~ Streptococcus, Staphylococcus, Escherichia, Helicobacter, Salmonella and ~~Bacillus~~ Bacillus.

In a particularly preferred embodiment, the present invention refers to the use of a polypeptide comprising the sequence of SEQ ID NO:1, or a functional fragment or derivative thereof, or of a nucleic acid comprising the sequence of SEQ ID NO:2, or a functional fragment or derivative thereof, for the manufacture of a medicament for the treatment of a disease caused by an agent, wherein the agent possesses at least one accessible sulphate and/or at least one accessible phosphate group and

wherein the agent is not HIV, influenza A virus, ~~Streptococcus mutans, Streptococcus gordonii, Streptococcus sobrinus, Streptococcus mitis, Streptococcus oralis Streptococcus intermedius, Streptococcus anginosus, Actinobacter actinomyces, Prevotella intermedia, Peptostreptococcus micros, Moraxella catarrhalis, Streptococcus pyogenes, Streptococcus agalactiae, Streptococcus sanguis, Streptococcus pneumonia, Klebsiella oxytoca, Escherichia coli, Haemophilus influenza, Staphylococcus aureus, Helicobacter pylori~~ Streptococcus mutans, Streptococcus gordonii, Streptococcus sobrinus, Streptococcus mitis, Streptococcus oralis Streptococcus intermedius, Streptococcus anginosus, Actinobacter actinomyces, Prevotella intermedia, Peptostreptococcus micros, Moraxella catarrhalis, Streptococcus pyogenes, Streptococcus agalactiae, Streptococcus sanguis, Streptococcus pneumonia, Klebsiella oxytoca, Escherichia coli, Haemophilus influenza, Staphylococcus aureus, Helicobacter pylori or ~~Bacteroides fragilis~~ Bacteroides fragilis.

Please amend the paragraph beginning at page 11, line 1 and ending at page 11, line 19 with the following:

Some examples of infectious diseases, to which the present invention is not restricted to, include AIDS, cholera, malaria, Dengue, epidemic dysentery, influenza, poliomyelitis, tuberculosis,

Typhoid Fever, Yellow Fever, amoeba dysentery, anthrax, lung inflammation, bilharziosis, borreliosis, botulism, BSE, campylobacter, Chagas disease, Creutzfeldt-Jakob disease, diphtheria, Ebola virus disease, Echinococcus~~Echinococcus~~ infection, cold, fatal familial insomnia, fish tapeworm, typhoid fever, river blindness, meningoencephalitis, athlete's foot, gas gangrene, yellow fever, shingles, tularemia, gastritis, hepatitis, herpes simplex –type 1, herpes simplex -type 2, herpes zoster, dog tapeworm, influenza, Japanese encephalitis, candidiasis, pertussis, bone marrow inflammation, cutaneous leishmaniasis, kuru, lamblia, Lassa fever, legionellosis, leprosy, listeriosis, pneumonia, Lyme borreliosis, measles, mouth and foot disease, bacterial meningitis, anthrax, inflammation of the middle ear, mononucleosis, mumps, noma, Norwalk virus infection, river blindness, osteomyelitis, paratyphoid fever, mononucleosis, Pityriasis versicolor, smallpox, polio, Reiter syndrome, mad cow disease, bovine tapeworm, Rocky Mountain spotted fever, dysentery, enteric fever, salmonellae paratyphoid fever, salmonellae typhoid fever, SARS, schistosomiasis, sleeping sickness, pig tapeworm, sexually transferable diseases, canker sore, rabies, toxoplasmosis, scrapie, trichomoniasis, trichophytia, Tsutsugamushi fever, trypanosomiasis, tuberculosis, tularemia, typhoid fever, visceral leishmaniasis, West Nile fever, chickenpox, dwarf tapeworm.